

59th annual ratio study compiled from the operating statements and balance sheets submitted by representative members of the printing industry, and computed by RGS Enterprises, Inc., 330-332 East 25th Street, Baltimore, Maryland 21218.

1982 Financial Ratios Quick Printers

©1982 by Printing Industries of America, Inc.

This material must not be reproduced in whole or in part in any form whatsoever without the express permission of

Printing Industries of America Inc.

Management Services Department
1730 North Lynn Street
Arlington, Virginia 22209

Edited and Prepared by H. R. Margolis Company,
Certified Public Accountants
New York and Philadelphia (Bala Cynwyd)

Printed in U.S.A.

Dear Quick Printers:

Again in 1982, it is our pleasure to present to you PIA'S FINANCIAL RATIO STUDY FOR QUICK PRINTERS. This year 29 firms classified as quick printers in the United States and Canada participated in this study by responding to PIA's questionnaire on financial performance. Among these respondents, 12 firms may be considered "Profit Leaders," earning eight percent or greater pretax profits on sales. Such widespread participation has made these annual PIA Ratio Studies the most comprehensive financial reports available on the health of the graphic arts industry.

This book presents the ratios and statistics by sales volume - for example, sales to \$250,000, sales from \$250,000 to \$500,000, etc.; and by location for example, Metropolitan Area and Non-Metropolitan Area. Readers can compare the data from their own firm's financial statements with similar data from other firms in four areas: Operations based on Sales and its Supporting Schedules, Balance Sheet Ratios, Significant Facts, and Return on Investment.

We strongly believe in the importance of sharing this type of information among members of the graphic arts community and are proud to have played a role in compiling these studies. Moreover, we commend PIA and its staff for their continuing sponsorship of these studies and for the help that they have so graciously provided in their completion.

H. R. Margolis Company

H. R. MARGOLIS COMPANY

1982 is the 59th consecutive year in which Printing Industries of America, Inc. has collected, compiled and published detailed financial ratio information for members of the graphic arts community. The data presented each year provide a detailed and comprehensive picture of the financial status of the major segments of the graphic arts industries, as well as allowing individual firms to compare their annual performance with that of many other similar firms, including those which earn well above average profits. Ratio results for several different segments of our industry are available in book form. In 1982 these books include:

- All Printers by Sales Volume
- + Management Guide to the Ratios
- All Printers by Product Specialty
- Quick Printers
- Printers by Geographic Area
- Sheetfed Printers, by Size and Geographic Area
- Web Offset Printers, Heatset and Non-heatset
- Book Manufacturers
- Large Printers (over \$10 million in sales)
- Specialists: Typographers
Litho Prep Specialists
- Binders

If you are using the Ratios to analyze your company's performance, it is usually advisable to use the data from at least two of these books as standards of comparison. Such analysis is made much easier by participating in the Studies early each year and ordering an individual company computer printout, which compares a participant's ratios to those of companies which are similar in size, production equipment, markets and other key features. If using only the Ratio books, be careful in comparing your firm's performance to that of the "mixed bag" of printers whose results are summarized in *All Printers by Sales Volume*.

Please refer your questions on the PIA Ratio Studies to your nearest local PIA affiliated association, or to

Bill Howe
Director Management Services
Printing Industries of America, Inc.
1730 N. Lynn Street
Arlington, VA 22209 — 703-841-8136

TABLE OF CONTENTS

	Page Number
FOREWORD.....	2
CHAPTER 1 - BY SIZE OF FIRM.....	4-13
Report on Operations - Sales = 100%.....	4- 5
Supporting Schedules - Sales = 100%.....	4- 7
Balance Sheet.....	8- 9
Significant Facts.....	10-11
Return on Investment Chart - Per \$100 of Sales - All Firms Reporting...	12
Return on Investment - Per \$100 of Sales - By Size of Firm.....	13
CHAPTER 2 - BY METROPOLITAN AND NON-METROPOLITAN AREA.....	14-18
Report on Operations - Sales = 100%.....	14
Supporting Schedules - Sales = 100%.....	14-15
Balance Sheet.....	16
Significant Facts.....	17
Return on Investment - Per \$100 of Sales.....	18
ABSOLUTE DATA.....	19
BASIC GUIDE TO USING YOUR QUICK PRINTERS' RATIO STUDY.....	20-21

If you would like more information concerning the American Quick Printing Association, Printing Industries of America, Inc. or questions about the Ratio Studies, please contact:

Donald M. Piercy
Executive Director
American Quick Printing Association

Printing Industries of the Gulf Coast, Inc.
1324 West Clay Street
Houston, Texas 77019
(713) 961-4281

CHAPTER 1 - BY SIZE OF FIRM

REPORT ON OPERATIONS - SALES = 100%

	ALL FIRMS REPORTING		SALES FROM 0-\$250,000	
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT				
MATERIAL				
Paper	16.90	16.49	16.11	14.39
Other chargeable materials	4.84	4.67	5.39	5.62
Outside services	7.83	9.02	7.74	6.14
TOTAL MATERIAL	29.57	30.18	29.24	26.15
FACTORY PAYROLL	23.42	22.21	23.21	23.18
FACTORY EXPENSES	20.62	15.69	20.49	19.12
TOTAL FACTORY COST OF PRODUCT	73.61	68.08	72.94	68.45
GROSS PROFIT	26.39	31.92	27.06	31.55
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	11.83	10.62	10.80	8.50
Selling expenses	5.87	4.89	5.45	4.76
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	17.70	15.51	16.25	13.26
INCOME BEFORE INTEREST EXPENSE	8.69	16.41	10.81	18.29
Interest expense	1.67	1.28	1.83	1.75
OPERATING INCOME	7.02	15.13	8.98	16.54
Other income (expense)	0.43	0.37	(0.72)	0.00
INCOME BEFORE INCOME TAXES	7.45	15.50	8.26	16.54

SUPPORTING SCHEDULES - SALES = 100%

OTHER CHARGEABLE MATERIALS				
Ink	0.87%	0.71%	1.17%	1.68%
Film	0.94	0.84	0.54	0.77
Plates	1.93	2.42	2.96	2.42
Other chargeable materials	1.10	0.70	0.72	0.75
TOTAL OTHER CHARGEABLE MATERIALS	4.84	4.67	5.39	5.62
OUTSIDE SERVICES				
Composition	1.05	0.98	1.14	0.36
Offset preparation	0.71	0.21	0.33	0.00
Printing	4.18	6.04	3.94	5.33
Binding	0.25	0.32	0.31	0.16
Other outside services	1.64	1.47	2.02	0.29
TOTAL OUTSIDE SERVICES	7.83	9.02	7.74	6.14

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.
 *** Information not submitted.

SALES FROM \$250,000-\$500,000		SALES FROM \$500,000-\$1,500,000		SALES FROM \$1,500,000-\$5,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
18.20	17.15	16.95	19.58	16.91	19.03
5.55	5.04	2.97	1.37	4.73	4.77
8.39	9.25	10.25	21.55	3.50	4.88
32.14	31.44	30.17	42.50	25.14	28.68
25.17	23.21	21.82	18.23	23.45	22.31
21.25	15.98	20.35	5.78	20.31	15.03
78.56	70.63	72.34	66.51	68.90	66.02
21.44	29.37	27.66	33.49	31.10	33.98
8.96	8.47	17.53	21.07	11.42	8.68
4.93	6.54	7.70	4.62	6.00	3.90
13.89	15.01	25.23	25.69	17.42	12.58
7.55	14.36	2.43	7.80	13.68	21.40
1.37	1.88	1.96	0.47	1.24	0.03
6.18	12.48	0.47	7.33	12.44	21.37
0.26	0.01	2.54	1.38	0.97	0.85
6.44	12.49	3.01	8.71	13.41	22.22

0.71%	0.33%	0.70%	0.02%	0.77%	0.63%
0.55	0.50	0.94	0.00	1.28	1.80
2.83	3.92	0.70	1.23	1.36	1.02
1.46	0.29	0.63	0.12	1.32	1.32
5.55	5.04	2.97	1.37	4.73	4.77
0.47	0.04	1.83	3.26	0.00	
2.29	1.58	0.18	0.49	0.00	
4.43	3.87	5.64	12.24	3.50	
0.38	2.39	0.15	0.41	0.00	
0.82	1.37	2.45	5.15	0.00	
8.39	9.25	10.25	21.55	3.50	***

CHAPTER 1 - BY SIZE OF FIRM

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS REPORTING		SALES FROM 0-\$250,000	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL				
Salaries - executive	3.00%	3.06%	2.86%	4.33%
Direct wages	12.38	10.08	14.65	12.13
General factory salaries and wages	5.40	6.54	3.78	4.72
Packing, shipping and delivery wages	0.24	0.48	0.00	0.00
Payroll taxes	1.42	1.07	1.25	0.95
Employee benefits	0.98	0.98	0.66	1.05
TOTAL FACTORY PAYROLL	23.42	22.21	23.21	23.18
FACTORY EXPENSES				
Fixed Expenses				
Depreciation - real estate	0.01	0.00	0.00	0.00
Depreciation - other	3.43	3.34	2.98	3.97
Taxes - real estate	0.04	0.00	0.00	0.00
Taxes - other	0.19	0.17	0.18	0.13
Insurance	0.81	0.80	1.22	1.24
Building rent	3.66	3.04	4.33	3.32
Utilities - heat, light, etc.	0.91	0.95	1.08	1.26
Equipment rental	7.74	5.14	7.42	7.22
Total Fixed Expenses	16.79	13.44	17.21	17.14
Other Expenses				
Factory supplies and expense	0.76	0.60	0.97	0.77
Packing, shipping and delivery expense	0.70	0.41	0.15	0.12
Repairs and maintenance	1.92	1.04	1.74	0.84
Other factory expenses	0.45	0.20	0.42	0.25
Total Other Expenses	3.83	2.25	3.28	1.98
TOTAL FACTORY EXPENSES	20.62	15.69	20.49	19.12
ADMINISTRATIVE EXPENSES				
Salaries - executive	4.56	4.05	4.05	2.30
Salaries - office	2.27	2.19	1.83	2.15
Payroll taxes	0.38	0.27	0.19	0.16
Employee benefits	0.22	0.15	0.25	0.06
Bad debts	0.30	0.19	0.31	0.24
Office supplies and expenses	0.67	0.69	0.51	0.52
Professional fees	0.57	0.46	0.55	0.31
Taxes - business	0.30	0.54	0.35	0.69
Telephone	0.87	0.56	0.97	0.61
Other administrative expenses	1.69	1.52	1.79	1.46
TOTAL ADMINISTRATIVE EXPENSES	11.83	10.62	10.80	8.50
SELLING EXPENSES				
Salaries - executive	1.06	1.04	1.37	0.94
Salaries and commissions - salesmen	0.50	0.60	0.00	0.00
Salaries - sales office clerical	0.70	0.29	0.63	0.51
Payroll taxes	0.12	0.11	0.04	0.05
Employee benefits	0.08	0.07	0.05	0.09
Advertising	1.75	1.20	1.64	1.44
Travel and entertainment	0.97	0.72	1.18	0.68
Other selling expenses	0.69	0.86	0.54	1.05
TOTAL SELLING EXPENSES	5.87	4.89	5.45	4.76

SALES FROM
\$250,000-\$500,000

ALL FIRMS PROFIT
LEADERS

4.26% 2.75%
12.90 9.40
4.83 9.38
0.05 0.00
1.63 1.26
1.50 0.42

25.17 23.21

SALES FROM
\$500,000-\$1,500,000

ALL FIRMS PROFIT
LEADERS

3.32% 1.57%
7.90 0.00
7.93 14.11
0.14 0.00
1.85 2.04
0.68 0.51

21.82 18.23

SALES FROM
\$1,500,000-\$5,000,000

ALL FIRMS PROFIT
LEADERS

0.72% 1.02%
11.40 14.73
7.51 1.56
1.45 2.90
0.88 0.29
1.49 1.81

23.45 22.31

0.00 0.00
3.72 4.22
0.05 0.00
0.12 0.00
0.70 0.81
3.23 4.01
0.76 1.09
8.42 2.79
17.00 12.92

0.82 0.65
2.01 0.60
1.21 1.56
0.21 0.25
4.25 3.06
21.25 15.98

0.00 0.00
3.76 2.53
0.06 0.00
0.25 0.61
0.27 0.00
3.25 1.47
0.80 0.33
8.47 0.00
16.86 4.94

0.38 0.17
0.25 0.37
2.34 0.30
0.52 0.00
3.49 0.84
20.35 5.78

0.06 0.00
3.78 1.41
0.08 0.00
0.26 0.00
0.59 0.29
3.02 2.78
0.79 0.47
6.50 6.40
15.08 11.35

0.56 0.46
0.73 1.14
3.11 1.86
0.83 0.22
5.23 3.68
20.31 15.03

4.66 4.94
1.05 0.00
0.40 0.33
0.17 0.20
0.14 0.00
0.51 0.61
0.54 0.62
0.14 0.23
0.68 0.67
0.67 0.87
8.96 8.47

0.30 0.00
1.21 2.15
0.15 0.00
0.11 0.11
0.04 0.00
0.97 1.03
1.26 2.22
0.89 1.03
4.93 6.54

6.75 11.10
3.77 3.78
0.71 0.75
0.20 0.22
0.40 0.02
0.54 0.10
0.66 0.64
0.35 0.55
0.99 0.43
3.16 3.48
17.53 21.07

1.87 2.92
0.00 0.00
1.09 0.00
0.26 0.38
0.16 0.06
2.90 1.23
0.54 0.00
0.88 0.03
7.70 4.62

2.74 1.29
3.47 2.90
0.38 0.07
0.31 0.30
0.41 0.44
1.61 1.85
0.51 0.58
0.32 0.41
0.69 0.43
0.98 0.41
11.42 8.68

0.26 0.52
1.54 1.45
1.30 0.23
0.16 0.03
0.14 0.09
1.63 0.65
0.47 0.02
0.50 0.91
6.00 3.90

CHAPTER 1 - BY SIZE OF FIRM

BALANCE SHEET

	ALL FIRMS REPORTING		SALES FROM 0-\$250,000	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
ASSETS				
CURRENT ASSETS				
Cash	13.14%	15.87%	10.42%	13.52%
Receivables	27.75	34.09	26.69	31.02
Inventories	8.32	7.10	9.63	7.66
Other current assets	7.30	11.47	7.64	9.59
TOTAL CURRENT ASSETS	56.51	68.53	54.38	61.79
FIXED ASSETS				
Real estate	1.06	0.00	0.00	0.00
Less: Accumulated depreciation	0.05	0.00	0.00	0.00
	1.01	0.00	0.00	0.00
Machinery and equipment	60.98	46.07	65.33	61.47
Less: Accumulated depreciation	26.01	22.29	25.66	30.59
	34.97	23.78	39.67	30.88
Other fixed assets	9.87	10.80	8.29	8.49
Less: Accumulated depreciation	3.18	3.53	2.68	1.17
	6.69	7.27	5.61	7.32
NET FIXED ASSETS	42.67	31.05	45.28	38.20
OTHER ASSETS	0.82	0.42	0.34	0.01
TOTAL ASSETS	100.00	100.00	100.00	100.00
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Notes payable	8.54	7.22	11.38	7.79
Accounts payable	13.37	6.19	9.95	7.10
Other current liabilities	6.20	6.89	4.80	4.04
TOTAL CURRENT LIABILITIES	28.11	20.30	26.13	18.93
LONG-TERM LIABILITIES	35.11	20.65	31.14	19.26
TOTAL LIABILITIES	63.22	40.95	57.27	38.19
SHAREHOLDERS' AND PROPRIETORS' EQUITY	36.78	59.05	42.73	61.81
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	2.01	3.38	2.08	3.26
QUICK RATIO	1.71	3.03	1.71	2.86
TOTAL LIABILITIES TO EQUITY	1.72	0.69	1.34	0.62
LONG-TERM LIABILITIES TO EQUITY	0.95	0.35	0.73	0.31
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.43	0.48	0.39	0.50

SALES FROM \$250,000-\$500,000		SALES FROM \$500,000-\$1,500,000		SALES FROM \$1,500,000-\$5,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
22.79%	22.57%	12.16%	26.82%	5.86%	5.26%
28.87	27.74	26.05	40.11	31.54	43.61
8.01	5.45	4.65	0.45	10.41	13.68
7.28	17.25	3.34	0.00	12.25	22.88
66.95	73.01	46.20	67.38	60.06	85.43
0.00	0.00	0.00	0.00	7.71	0.00
0.00	0.00	0.00	0.00	0.37	0.00
0.00	0.00	0.00	0.00	7.34	0.00
56.25	31.39	59.71	35.62	58.10	25.03
29.35	10.19	22.60	20.21	26.35	11.57
26.90	21.20	37.11	15.41	31.75	13.46
9.18	7.37	17.23	22.99	4.77	8.96
4.38	3.02	2.27	6.81	3.92	7.85
4.80	4.35	14.96	16.18	0.85	1.11
31.70	25.55	52.07	31.59	39.94	14.57
1.35	1.44	1.73	1.03	0.00	0.00
100.00	100.00	100.00	100.00	100.00	100.00
6.87	13.42	6.08	6.52	6.63	0.00
15.25	6.89	20.81	0.54	9.19	8.42
8.80	5.83	1.62	0.00	12.74	23.37
30.92	26.14	28.51	7.06	28.56	31.79
39.70	41.70	47.38	23.37	20.55	1.06
70.62	67.84	75.89	30.43	49.11	32.85
29.38	32.16	24.11	69.57	50.89	67.15
100.00	100.00	100.00	100.00	100.00	100.00

2.17	2.79	1.62	9.54	2.10	2.69
1.91	2.58	1.46	9.48	1.74	2.26
2.40	2.11	3.15	0.44	0.97	0.49
1.35	1.30	1.97	0.34	0.40	0.02
0.52	0.32	0.38	0.57	0.45	0.46

CHAPTER 1 - BY SIZE OF FIRM

SIGNIFICANT FACTS

	ALL FIRMS REPORTING		SALES FROM 0-\$250,000	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT				
Average assets per employee - All employees	\$ 17,570	\$ 22,241	\$ 18,304	\$ 23,770
Average assets per factory employee (Excluding Executives)	26,936	32,478	30,292	37,666
Average net worth per employee - All employees	6,432	11,633	7,331	12,436
Average gross plant investment per factory employee (Excluding Executives)	19,059	19,479	21,395	26,071
Net worth percentage of fixed assets	318.46%	701.48%	550.74%	1,061.65%
EMPLOYEES				
Percent factory - All employees	76.38%	80.67%	72.73%	80.83%
Percent administrative - All employees	16.88	12.86	20.81	12.92
Percent sales - All employees	6.74	6.47	6.46	6.25
SALES - VALUE OF PRODUCT PRODUCED INCLUDING EXECUTIVES				
Sales per employee - All employees	\$ 47,603	\$ 55,910	\$ 47,627	\$ 55,475
Sales per factory employee	65,850	73,639	72,788	76,740
Sales less material per factory employee	45,389	50,561	50,017	55,344
Sales per administrative employee	209,144	213,659	109,253	113,668
EXCLUDING EXECUTIVES				
Sales per employee - All employees	60,438	65,353	65,251	65,762
Sales per factory employee	72,228	79,074	77,353	83,681
Sales less material per factory employee	49,869	54,325	53,244	60,315
SALES PER SALESMAN	222,500	230,000	0	0
SALES TO CURRENT ASSETS	579%	436%	584%	483%
PAYROLL - INCLUDING TAXES AND BENEFITS INCLUDING EXECUTIVES				
Total payroll percentage of sales	33.34%	30.98%	31.62%	29.44%
Factory payroll percentage of gross plant investment	204.92	354.11	301.53	509.57
Payroll per employee - All employees	\$ 15,416	\$ 16,777	\$ 14,337	\$ 15,293
Payroll per factory employee	14,349	14,583	14,666	14,490
Payroll per administrative employee	18,042	20,061	9,849	10,441
Payroll per sales employee	11,504	16,012	5,767	7,095
PAYROLL - EXCLUDING TAXES AND BENEFITS EXCLUDING EXECUTIVES				
Payroll per employee - All employees	\$ 12,348	\$ 12,979	\$ 12,929	\$ 12,594
Payroll per factory employee	12,204	12,464	12,816	12,215
Payroll per administrative employee	8,055	8,753	4,306	4,523
Payroll per sales employee	5,292	5,702	1,770	1,104
EXECUTIVE PAYROLL				
Payroll per executive - All executives	24,665	23,396	12,656	16,109
Payroll per factory executive	12,528	15,590	8,238	11,776
Payroll per administrative executive	24,200	23,333	7,690	6,509
Payroll per sales executive	9,507	12,971	7,134	9,925
RECEIVABLES				
Collection period	36.4	47.1	35.3	44.1
PROFIT				
Gross profit percentage of sales	26.39%	31.92%	27.06%	31.55%
Average gross profit per factory employee	\$ 19,545	\$ 26,121	\$ 22,000	\$ 28,108
Income before taxes percentage of sales	7.45%	15.50%	8.26%	16.54%
Average income before taxes per employee	\$ 3,877	\$ 8,683	\$ 4,296	\$ 9,277

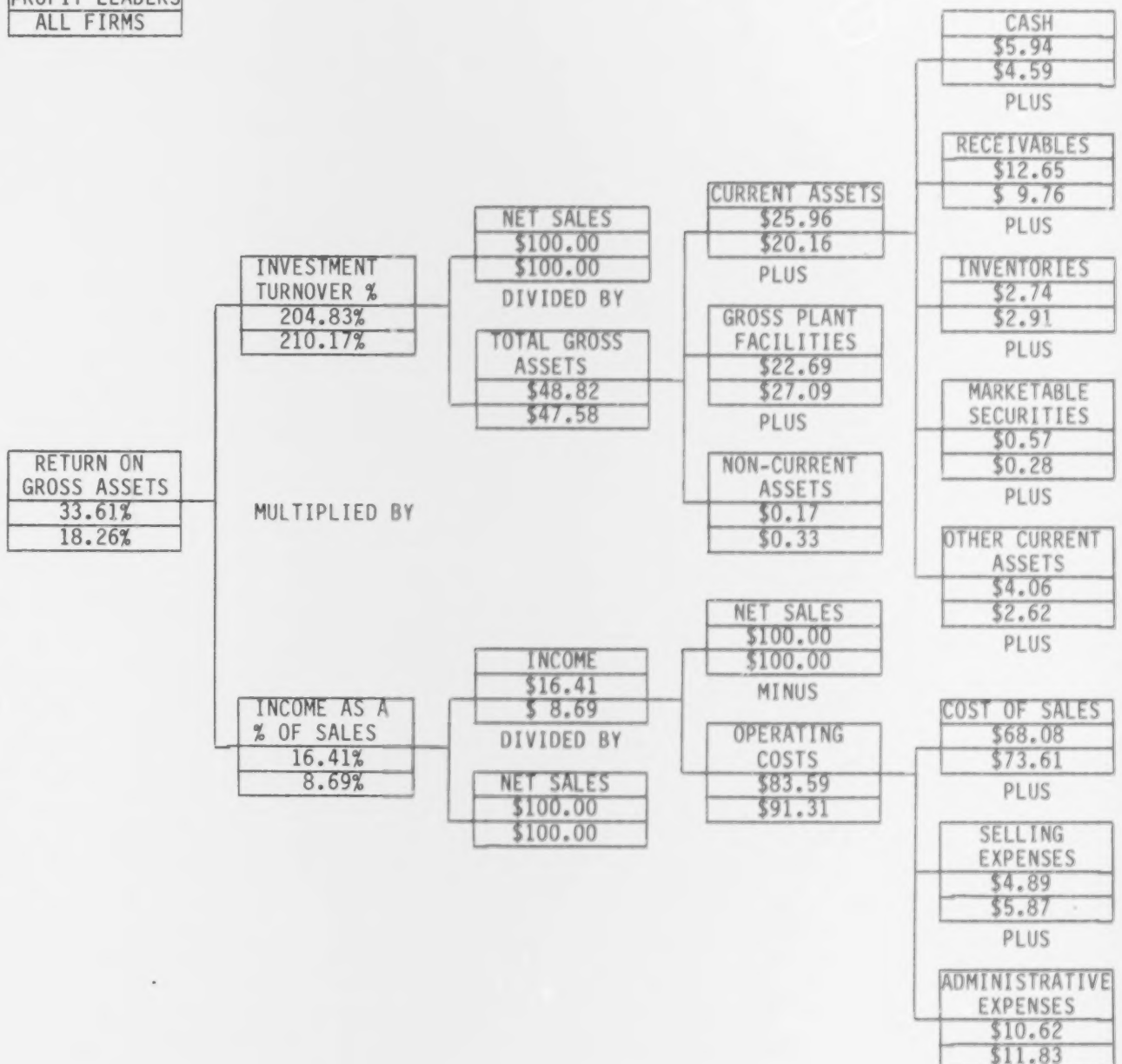
SALES FROM \$250,000-\$500,000		SALES FROM \$500,000-\$1,500,000		SALES FROM \$1,500,000-\$5,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
\$ 14,757	\$ 18,266	\$ 18,111	\$ 22,373	\$ 19,481	\$ 21,500
19,627	23,247	30,493	31,962	24,322	26,658
3,893	2,481	4,928	15,566	10,433	14,443
12,292	10,869	24,078	18,730	16,362	9,063
153.08%	312.58%	77.86%	220.27%	271.93%	491.09%
82.58%	83.75%	74.15%	75.00%	79.82%	82.79%
11.17	6.25	18.28	20.00	13.01	12.15
6.25	10.00	7.57	5.00	7.17	5.06
\$ 48,955	\$ 52,799	\$ 48,357	\$ 61,259	\$ 44,031	\$ 54,976
59,749	63,563	66,489	81,679	54,758	66,373
40,088	43,082	45,536	46,966	40,561	47,283
239,723	181,877	267,893	306,296	367,183	452,777
58,903	60,378	62,132	76,574	46,142	57,883
65,927	67,894	80,285	87,513	55,792	67,994
44,372	46,237	55,230	50,320	41,324	48,449
200,000	0	220,000	220,000	250,000	250,000
560%	455%	670%	406%	460%	303%
33.25%	30.94%	36.63%	37.42%	33.75%	29.19%
198.18	342.14	84.42	85.16	107.60	168.63
\$ 15,887	\$ 15,841	\$ 17,708	\$ 22,926	\$ 14,389	\$ 16,017
14,808	14,344	14,286	14,887	12,685	14,798
18,256	19,908	31,440	48,543	22,147	20,591
6,679	6,782	20,935	41,047	23,011	26,959
\$ 11,612	\$ 12,630	\$ 12,275	\$ 13,697	\$ 12,001	\$ 13,761
11,856	12,748	12,068	12,349	11,183	13,041
4,146	0	16,303	23,131	13,772	15,817
5,681	6,459	1,434	0	20,965	24,437
22,879	14,007	41,856	47,723	38,027	30,317
13,241	10,000	15,989	19,200	18,957	29,013
20,201	18,013	50,901	68,000	40,675	34,458
2,857	0	24,231	35,693	6,180	12,360
29.4	31.5	36.8	53.6	51.5	65.2
21.44%	29.37%	27.66%	33.49%	31.10%	33.98%
\$ 14,005	\$ 19,989	\$ 22,309	\$ 29,310	\$ 17,730	\$ 23,101
6.44%	12.49%	3.01%	8.71%	13.41%	22.22%
\$ 3,342	\$ 6,763	\$ 1,687	\$ 5,335	\$ 6,840	\$ 12,169

CHAPTER 1 - BY SIZE OF FIRM

RETURN ON INVESTMENT (ROI) CHART - ALL FIRMS REPORTING

RETURN ON INVESTMENT CHART - BASE: \$100 OF SALES

PROFIT LEADERS
ALL FIRMS



CHAPTER 1 - BY SIZE OF FIRM

RETURN ON INVESTMENT - PER \$100 OF SALES

	SALES FROM 0-\$250,000		SALES FROM \$250,000-\$500,000		SALES FROM \$500,000-\$1,500,000		SALES FROM \$1,500,000-\$5,000,000	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT								
Current Assets:								
Cash	\$ 4.35	\$ 6.30	\$ 6.43	\$ 4.95	\$ 4.41	\$ 9.79	\$ 2.35	\$ 2.04
Receivables	9.59	11.85	8.03	8.53	9.72	14.66	13.38	17.16
Inventories	3.36	2.95	2.28	1.91	1.69	0.16	4.48	5.52
Marketable securities	0.14	0.09	0.00	0.00	0.00	0.00	1.59	3.18
Other current assets	2.79	3.85	2.72	6.99	1.68	0.00	3.34	5.80
	20.23	25.04	19.46	22.38	17.50	24.61	25.14	33.70
Plant Investment:								
Land and building	0.00	0.00	0.00	0.00	0.00	0.00	5.18	0.00
Machinery and equipment	24.90	26.54	15.94	11.84	24.49	13.01	26.97	9.78
Other fixed assets	2.48	2.28	3.20	3.04	6.65	8.39	1.90	3.57
	27.38	28.82	19.14	14.88	31.14	21.40	34.05	13.35
Non-Current Assets	0.13	0.00	0.34	0.64	0.95	0.38	0.00	0.00
TOTAL INVESTMENT	47.74	53.86	38.94	37.90	49.59	46.39	59.19	47.05
INVESTMENT TURNOVER PER \$100 OF SALES								
	209.47%	185.67%	256.81%	263.85%	201.65%	215.56%	168.95%	212.54%
EARNINGS								
Cost of Product	\$72.94	\$68.45	\$78.56	\$70.63	\$72.34	\$66.51	\$68.90	\$66.02
Selling Expenses	5.45	4.76	4.93	6.54	7.70	4.62	6.00	3.90
Administrative Expenses	10.80	8.50	8.96	8.47	17.53	21.07	11.42	8.68
	89.19	81.71	92.45	85.64	97.57	92.20	86.32	78.60
Income Before Interest, Other Income (Expense), and Taxes	10.81	18.29	7.55	14.30	2.43	7.80	13.68	21.40
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME								
	22.64%	33.96%	19.39%	37.86%	4.90%	16.81%	23.11%	45.48%

CHAPTER 2 - BY METROPOLITAN AND NON-METROPOLITAN AREA

REPORT ON OPERATIONS - SALES = 100%

	METROPOLITAN		NON-METROPOLITAN**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT			
MATERIAL			
Paper	17.30	16.88	14.95
Other chargeable materials	4.73	4.77	5.33
Outside services	7.53	8.83	9.25
TOTAL MATERIAL	29.56	30.48	29.53
FACTORY PAYROLL	23.59	21.00	22.68
FACTORY EXPENSES	19.95	15.71	23.85
TOTAL FACTORY COST OF PRODUCT	73.10	67.19	76.06
GROSS PROFIT	26.90	32.81	23.94
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	12.07	11.39	10.69
Selling expenses	5.88	5.17	5.82
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	17.95	16.56	16.51
INCOME BEFORE INTEREST EXPENSE	8.95	16.25	7.43
Interest expense	1.71	1.27	1.43
OPERATING INCOME	7.24	14.98	6.00
Other income	0.51	0.40	0.00
INCOME BEFORE INCOME TAXES	7.75	15.38	6.00
SUPPORTING SCHEDULES			
OTHER CHARGEABLE MATERIALS			
Ink	0.85%	0.67%	1.07%
Film	1.00	1.03	0.00
Plates	1.70	2.22	4.26
Other chargeable materials	1.18	0.85	0.00
TOTAL OTHER CHARGEABLE MATERIALS	4.73	4.77	5.33
OUTSIDE SERVICES			
Composition	0.92	1.13	1.56
Offset preparation	0.27	0.24	2.32
Printing	4.66	5.40	2.66
Binding	0.32	0.37	0.00
Other outside services	1.36	1.69	2.71
TOTAL OUTSIDE SERVICES	7.53	8.83	9.25

** Sample insufficient for "Profit Leaders."

CHAPTER 2 - BY METROPOLITAN AND NON-METROPOLITAN AREA

SUPPORTING SCHEDULES - SALES = 100%

	METROPOLITAN		NON-METROPOLITAN**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
FACTORY PAYROLL			
Salaries - executive	2.78%	2.52%	4.05%
Direct wages	12.31	9.09	12.76
General factory salaries and wages	5.82	7.13	3.40
Packing, shipping and delivery wages	0.29	0.53	0.00
Payroll taxes	1.40	0.96	1.54
Employee benefits	0.99	0.77	0.93
TOTAL FACTORY PAYROLL	23.59	21.00	22.68
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.01	0.00	0.00
Depreciation - other	3.47	2.83	3.24
Taxes - real estate	0.04	0.00	0.00
Taxes - other	0.19	0.17	0.17
Insurance	0.74	0.68	1.16
Building rent	3.46	3.20	4.63
Utilities - heat, light, etc.	0.85	0.92	1.15
Equipment rental	7.16	5.62	10.63
Total Fixed Expenses	15.92	13.42	20.98
Other Expenses			
Factory supplies and expense	0.86	0.65	0.27
Packing, shipping and delivery expense	0.80	0.40	0.21
Repairs and maintenance	1.91	1.02	1.99
Other factory expenses	0.46	0.22	0.40
Total Other Expenses	4.03	2.29	2.87
TOTAL FACTORY EXPENSES	19.95	15.71	23.85
ADMINISTRATIVE EXPENSES			
Salaries - executive	4.54	4.42	4.73
Salaries - office	2.65	2.39	0.44
Payroll taxes	0.42	0.29	0.16
Employee benefits	0.26	0.16	0.07
Bad debts	0.32	0.21	0.20
Office supplies and expenses	0.63	0.70	0.84
Professional fees	0.59	0.48	0.44
Taxes - business	0.33	0.59	0.13
Telephone	0.82	0.57	1.13
Other administrative expenses	1.51	1.58	2.55
TOTAL ADMINISTRATIVE EXPENSES	12.07	11.39	10.69
SELLING EXPENSES			
Salaries - executive	0.83	1.14	2.18
Salaries and commissions - salesmen	0.61	0.65	0.00
Salaries - sales office clerical	0.58	0.32	1.31
Payroll taxes	0.11	0.12	0.16
Employee benefits	0.07	0.08	0.16
Advertising	1.80	1.22	1.43
Travel and entertainment	1.05	0.71	0.58
Other selling expenses	0.83	0.93	0.00
TOTAL SELLING EXPENSES	5.88	5.17	5.82

** Sample insufficient for "Profit Leaders."

CHAPTER 2 - BY METROPOLITAN AND NON-METROPOLITAN AREA

BALANCE SHEET

	METROPOLITAN		NON-METROPOLITAN**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
ASSETS			
CURRENT ASSETS			
Cash	13.03%	16.06%	13.67%
Receivables	29.66	36.19	18.59
Inventories	8.33	6.61	8.27
Other current assets	8.17	12.53	3.06
TOTAL CURRENT ASSETS	59.19	71.39	43.59
FIXED ASSETS			
Real estate	1.28	0.00	0.00
Less: Accumulated depreciation	0.06	0.00	0.00
	1.22	0.00	0.00
Machinery and equipment	57.85	40.81	76.02
Less: Accumulated depreciation	27.26	20.59	20.04
	30.59	20.22	55.98
Other fixed assets	11.84	11.78	0.43
Less: Accumulated depreciation	3.84	3.85	0.00
	8.00	7.93	0.43
NET FIXED ASSETS	39.81	28.15	56.41
OTHER ASSETS	1.00	0.46	0.00
TOTAL ASSETS	100.00	100.00	100.00
LIABILITIES AND EQUITY			
CURRENT LIABILITIES			
Notes payable	8.24	7.07	9.96
Accounts payable	14.16	5.78	9.60
Other current liabilities	6.89	7.13	2.92
TOTAL CURRENT LIABILITIES	29.29	19.98	22.48
LONG-TERM LIABILITIES	37.61	21.61	23.06
TOTAL LIABILITIES	66.90	41.59	45.54
SHAREHOLDERS' AND PROPRIETORS' EQUITY	33.10	58.41	54.46
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	2.02	3.57	1.94
QUICK RATIO	1.74	3.24	1.57
TOTAL LIABILITIES TO EQUITY	2.02	0.71	0.84
LONG-TERM LIABILITIES TO EQUITY	1.14	0.37	0.42
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.47	0.50	0.26

** Sample insufficient for "Profit Leaders."

CHAPTER 2 - BY METROPOLITAN AND NON-METROPOLITAN AREA

SIGNIFICANT FACTS

	METROPOLITAN		NON-METROPOLITAN**
	ALL FIRMS	PROFIT LEADERS	
INVESTMENT			
Average assets per employee - All employees	\$ 18,239	\$ 22,287	\$ 14,361
Average assets per factory employee (Excluding Executives)	27,944	32,960	22,098
Average net worth per employee - All employees	6,131	11,383	7,879
Average gross plant investment per factory employee (Excluding Executives)	19,520	18,682	16,844
Net worth percentage of fixed assets	364.96%	755.69%	95.25%
EMPLOYEES			
Percent factory - All employees	76.76%	78.91%	74.55%
Percent administrative - All employees	17.39	14.03	14.47
Percent sales - All employees	5.85	7.06	10.98
SALES - VALUE OF PRODUCT PRODUCED INCLUDING EXECUTIVES			
Sales per employee - All employees	\$ 49,159	\$ 57,191	\$ 40,132
Sales per factory employee	67,779	76,532	56,593
Sales less material per factory employee	46,405	52,373	40,513
Sales per administrative employee	212,502	233,083	193,026
EXCLUDING EXECUTIVES			
Sales per employee - All employees	61,638	66,542	54,676
Sales per factory employee	74,386	81,510	61,871
Sales less material per factory employee	51,046	55,784	44,224
SALES PER SALESMAN	222,500	230,000	0
SALES TO CURRENT ASSETS	563%	428%	655%
PAYROLL - INCLUDING TAXES AND BENEFITS INCLUDING EXECUTIVES			
Total payroll percentage of sales	33.64%	30.56%	31.91%
Factory payroll percentage of gross plant investment	230.38	380.31	82.68
Payroll per employee - All employees	\$ 15,991	\$ 16,950	\$ 12,657
Payroll per factory employee	14,823	14,556	12,072
Payroll per administrative employee	18,989	21,885	13,495
Payroll per sales employee	12,861	17,468	4,989
PAYROLL - EXCLUDING TAXES AND BENEFITS EXCLUDING EXECUTIVES			
Payroll per employee - All employees	\$ 12,947	\$ 13,154	\$ 9,469
Payroll per factory employee	12,715	12,592	9,752
Payroll per administrative employee	9,449	9,549	1,368
Payroll per sales employee	6,036	6,220	1,721
EXECUTIVE PAYROLL			
Payroll per executive - All executives	25,075	23,832	22,693
Payroll per factory executive	12,167	15,517	14,260
Payroll per administrative executive	25,317	25,454	18,840
Payroll per sales executive	9,178	14,151	11,086
RECEIVABLES			
Collection period	39.1	49.5	23.3
PROFIT			
Gross profit percentage of sales	26.90%	32.81%	23.94%
Average gross profit per factory employee	\$ 20,335	\$ 27,445	\$ 15,753
Income before taxes percentage of sales	7.75%	15.38%	6.00%
Average income before taxes per employee	\$ 4,142	\$ 8,831	\$ 2,603

** Sample insufficient for "Profit Leaders."

CHAPTER 2 - BY METROPOLITAN AND NON-METROPOLITAN AREA

RETURN ON INVESTMENT - PER \$100 OF SALES

	METROPOLITAN		NON-METROPOLITAN**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT			
Current Assets:			
Cash	\$ 4.49	\$ 5.84	\$ 5.08
Receivables	10.46	13.28	6.33
Inventories	2.84	2.40	3.25
Marketable securities	0.34	0.63	0.00
Other current assets	2.96	4.42	1.00
	21.09	26.57	15.66
Plant Investment:			
Land and building	0.86	0.00	0.00
Machinery and equipment	21.75	15.86	28.67
Other fixed assets	4.12	3.97	0.14
	26.73	19.83	28.81
Non-Current Assets	0.41	0.19	0.00
TOTAL INVESTMENT	48.23	46.59	44.47
INVESTMENT TURNOVER PER \$100 OF SALES	207.34%	214.64%	224.87%
EARNINGS			
Cost of Product	\$73.10	\$67.19	\$76.06
Selling Expenses	5.88	5.17	5.82
Administrative Expenses	12.07	11.39	10.69
	91.05	83.75	92.57
Income Before Interest, Other Income, and Taxes	8.95	16.25	7.43
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	18.56%	34.88%	16.71%

** Sample insufficient for "Profit Leaders."

ABSOLUTE DATA

	NUMBER OF PARTICIPATING FIRMS	AVERAGE FIRM REPORTING**		
		TOTAL ASSETS	SALES OR VALUE OF PRODUCTION	TOTAL INCOME
TOTAL - ALL FIRMS	29	\$ 269,000	\$ 646,000	\$ 59,000
TOTAL - PROFIT LEADERS*	12	264,000	689,000	116,000
BY SIZE OF FIRM				
ALL FIRMS				
0-\$250,000	12	64,000	171,000	16,000
\$250,000-\$500,000	7	99,000	335,000	22,000
\$500,000-\$1,500,000	6	343,000	876,000	38,000
\$1,500,000-\$5,000,000	4	1,071,000	2,268,000	285,000
PROFIT LEADERS				
0-\$250,000	6	75,000	186,000	31,000
\$250,000-\$500,000	2	106,000	332,000	41,000
\$500,000-\$1,500,000	2	447,000	1,225,000	107,000
\$1,500,000-\$5,000,000	2	807,000	2,017,000	455,000
BY AREA				
ALL FIRMS				
Metropolitan	24	302,000	713,000	67,000
Non-Metropolitan	5	110,000	322,000	19,000
PROFIT LEADERS				
Metropolitan	11	279,000	732,000	123,000

HOW THE NUMBERS ARE COMPUTED

The PIA Ratios are computed by the method of relative or common size. With this method each company's dollars are converted into a percentage to the total. Then these percentages are added in total and within a given sales class. This is a very simple way of avoiding what is known as self-weighting when various magnitudes are involved. With this method each company is given equal weight regardless of its size.

The following example illustrates how this calculation process eliminates the problem of the ratios giving inordinate weight to the results of very large firms.

Firm	Sales	Factory Payroll	% of Sales	
			Firm's Ratio Factory Payroll	PIA Ratio Factory Payroll
A	\$ 200,000	\$ 60,000	30.0%	
B	500,000	100,000	20.0	
C	8,000,000	975,000	12.2	
			62.2% divided by 3 = 20.7%	

- * "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.
 ** Unlike the ratios shown in this book, these figures are arithmetic averages.

BASIC GUIDE TO USING YOUR QUICK PRINTERS' RATIO STUDY

You have to know where you stand to make accurate decisions concerning your future. This guide to the ratio study, provided by the American Quick Printing Association, will give you a brief explanation of the purpose of the ratio study and a basic procedure to use to assess information about your shop.

The PURPOSE of the Quick Printers' Ratio Study is to serve as a guide to problem areas in your shop which can inhibit your growth and profitability. The study pinpoints:

- Where other quick printers of your sales volume and in a similar market area are financially.
- Profit leaders in your sales volume and market area.
- Problem areas, specifically from paper costs to getting a return on your investments, that are not pulling their weight that need attention because they are decreasing your profits.

WHY RATIOS? This financial study is presented in percentage form based on sales. Therefore, convert your statements to percentages of your sales volume to make specific comparisons. The PIA Ratio Study Program utilizes percentages because dollar amounts can vary for each quick printing shop, but percentages with the base of 100% of sales volume provide a common base for more accurate comparison.

BASIC PROCEDURE to use the Quick Printers' Ratio Study is to prepare your Statement of Operations and Balance Sheet, based on your sales volume figure percentages. You can do this, one item at a time comparing each item as you progress...or convert your information at one time, then compare taking special note of problem areas. If you participated in the study, it is a good idea to get your copy of your input and the Chart of Accounts provided by PIA to refresh your understanding of the data.

Compare your percentages to the profit leaders in your sales volume category in Chapter 1, then in your type of market in Chapter 2. If you see a large discrepancy in a particular area, multiply and convert the figures back to dollars, using your sales volume as a base, to get the actual cost of this problem area to your shop. By using this comparison, the study can give you specific direction as to where you can increase your current profits by focusing more effective management controls on areas that are not pulling their weight in your operation.

You now have a standard to investigate and improve your operation. Now that you are familiar with the use of this study, as you participate each year, make it a habit to thoroughly check your shop at least yearly to see how you measure with your peers in each of the categories.

KEEP IN MIND in working with this data, that when you participate, your firm's individual ratios are computed, then combined with individual ratios of other similar firms, rather than being based on a total dollar sum percentage for a group of companies. The result is a more representative ratio of the quick printing industry on a "common size basis"...where your shop is directly reflected and also used to evaluate other operations. A more specific guide, going step-by-step through a sample firm evaluation, is available in the first volume of the PIA Ratio Studies if you decide to perform a more detailed analysis.